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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,873	02/22/2002	Hiromitsu Tanaka	219871US0	7887
22850	7590	12/27/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			LE, HOA VAN	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 12/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/079,873

Applicant(s)

TANAKA ET AL.

Examiner

Hoa V. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-63 with respect to the applied species is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02 December 2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

This is in response to Papers filed on 12 November 2004.

- I. Up to this date the record shows that the Office docket clerk has not charged fee for Information Disclosure Statement filed on 02 December 2004 as authorized by applicants.
- II. The newly submitted references have about the same teachings and suggestions as those applied in this Office action and are cumulative but may be later applied when a claimed is amended. Anyone of their applications or adding any new type of rejections using the applied references on the record would not properly made the Office action to be final.
- III. Claims 37, 40 and 42-44 with respect to the applied species are rejected under 35 U.S.C. 103(a) as being unpatentable over Helmer-Metzmann et al (5,741,408) .

Helmer-Metzmann et al disclose, teach and suggest processes for obtaining an electrolyte polymer and (by) a process treating an electrolyte polymer with an amine type containing compound and then with a heated or raised temperature of the reaction mixture for further treatment. Others embodiments can also be found at col.1:11 and 14, 9:37-38 and 63-64 and Example 4 in which the reaction mixture from O⁰c being raised and treated at room temperature for 16 hours.

With respect to the claimed property of "a diffusion rate" in claim 40, it is not specified by patentees, However, it is found to be reasonable that the use of an amine type containing

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compound as required in the instant claim. The same or substantially the same "diffusion rate" would be resulted in the absence of an evidence to the contrary.

Since Helmer-Metzmman et al is reasonably disclose, teach and suggest the claimed processes and its products at the time the invention was made, The claim are found to be rendered prima facie obvious by Helmer-Metzmman et al for a reasonable expectation of obtaining stable electrolyte polymer for a long-term operation as disclosed, taught, suggested and obtained in Helmer-Metzmman et al.

Applicant's arguments filed 12 November 2004 have been fully considered but they are not persuasive.

Applicants urge that Helmer-Metzmman et al do not disclose a heat treatment. Please see Example 4 in which the reaction mixture from 0°C being raised and treated at room temperature for 16 hours.

Applicants urge that the claimed polymer as made by the claimed process has a creep resistant property which is not specified by patentees. It is reasonable that patentees' polymer would have the same or about the same creep resistant property since patentees disclose, teach and suggest the same processing steps and using the requisite chemical ingredients as claimed in the absence of an evidence to the contrary.

VI. Claims 38-63 with the applied species are rejected under 35 U.S.C. 103(a) as being unpatentable over Michot et al (6,670,424) .

Michot et al disclose, teach and suggest processes for obtaining an electrolyte polymer and (by) a process treating an electrolyte polymer (1) with an amine type containing compound

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and heating treatment or (2) with an amine type containing compound, heating treatment and base treatment or (3) with an amine type containing compound, heating treatment, base treatment and heat treatment. Others embodiments can also be found at col.1:13-14 and 26-27 and Examples 1-13.

With respect to the claimed property of “a diffusion rate” in claims 40, 48 and 56, it is not specified by patentees, However, it is found to be reasonable that the use of an amine type containing compound as required in the instant claim. The same or substantially the same “diffusion rate” would be resulted in the absence of an evidence to the contrary.

Since Michot et al is reasonably disclose, teach and suggest the claimed processes and its products at the time the invention was made, The claim are found to be rendered prima facie obvious by Michot et al for a reasonable expectation of obtaining a mechanical resistant electrolyte polymer for a long-term operation as disclosed, taught, suggested and obtained in Michot et al.

Applicant's arguments filed 12 November 2004 have been fully considered but they are not persuasive.

Applicants urge that patentees do not disclose a heat treatment or a base treatment or both of heat and base treatments. Please see Examples 1-13 (1) with an amine type containing compound and heating treatment or (2) with an amine type containing compound, heating treatment and base treatment or (3) with an amine type containing compound, heating treatment, base treatment and heat treatment.

Applicants urge that the claimed polymer as made by the claimed process has a creep resistant property which is not specified by patentees. It is reasonable that patentees' polymer

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would have the same or about the same creep resistant property since patentees disclose, teach and suggest the same processing steps and using the requisite chemical ingredients as claimed in the absence of an evidence to the contrary.

VII. Claims 1 and 6-8 with independent claim 1 being broadest and respect to the elected and applied species are provisionally rejected under 35 U.S.C. 103(a) as being unpatentable over Moya (Application Serial No. 10/848,399 which is equivalent to WO 01/27167 as submitted) with Application Serial No. 10/089,217 being abandoned. The rejection on the record is withdrawn in view of the amendment.

VIII. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

IX. Any inquiry concerning this communication or earlier communications from the

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examiner should be directed to Hoa V. Le whose telephone number is 571-272-1332.

The examiner can normally be reached from 6:30 AM to 4:00 PM on Monday through Thursday and about the same time of most Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelley can be reached on 571-272-1526.

Applicants may file a paper by (1) fax with a central facsimile receiving number 703-872-9306,

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hoa V. Le
Primary Examiner
Art Unit 1752

HVL
21 December 2004

**HOA VAN LE
PRIMARY EXAMINER**

A handwritten signature in black ink that reads "Hoa Van Le". The signature is written in a cursive, flowing style.